



## **NORTH CAROLINA**

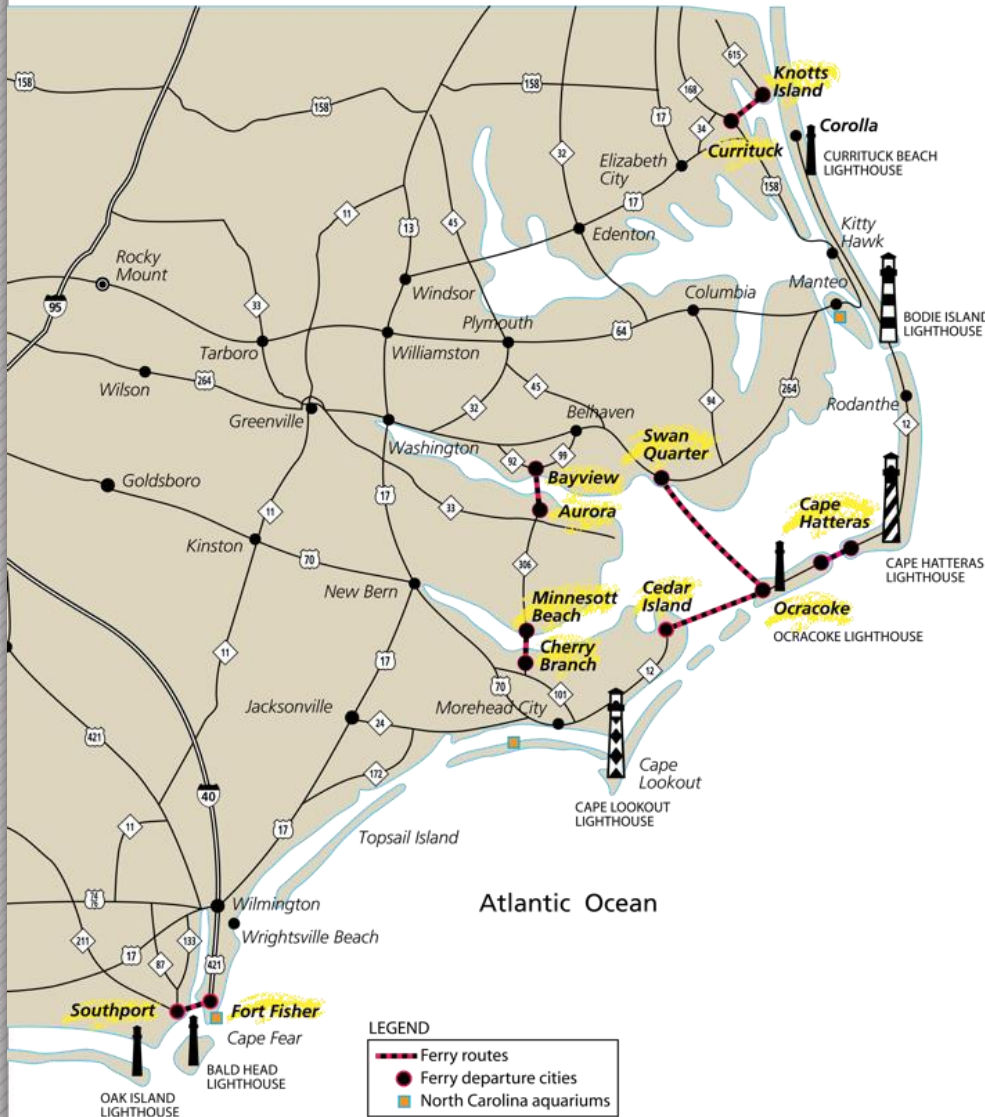
Department of Transportation



# Ferry Division—Hurricane Florence Impact

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# Ferry Division

- 2<sup>nd</sup> Largest State-operated Ferry System in the US
- 7 Scheduled Routes
- 1 Emergency Route
- 12 Terminals
- State-owned Shipyard
- 4 Field Maintenance Shops
- 21 Ferries
- Support Fleet (4 tugs, 3 Barges, 1 crane barge and dredges)



*On Sept. 12, Florence was a Category 4 hurricane with maximum sustained winds of 130 mph.*

# Preparing for Florence

*The Ferry Division was busy organizing safety measures well before the storm touched down on the eastern coast of NC.*





# Storm Preparation



During a 40 hour period the Ferry Division safely evacuated 2,181 persons and 1,074 vehicles

- *Ocracoke to Hatteras/Swan Quarter/Cedar Island* routes were used to evacuate residents/tourists from Ocracoke Island.
- Per state of emergency protocol, tolls and reservations for travel to and from Ocracoke were suspended at 5 a.m. on Sept. 11
- Mandatory evacuation in Ocracoke and Hatteras was suspended on Sept. 15 for residents, property owners, and workers. Visitors were granted re-entry the following day.

# Service Timeline During/After Storm

*Currently all channels are safe for travel. Dredging may possibly be needed at one site (Sloops Channel). We are investigating this in more detail.*

Currituck/Knotts Island	Shutdown 9/12	Resumed service 9/15
Southport	Shutdown 9/11	Restrictions in place as of 9/19 Restrictions lifted 9/21
Hatteras	Evacuations complete 9/12	Resumed operations for Emergency Personnel only 9/16
Ocracoke	Evacuations complete 9/12	Resumed operations for Emergency Personnel only 9/16. Normal ops 9/21
Swan Quarter	Shutdown 9/12	Resumed service 9/16 (limited schedule)
Cedar Island	Shutdown 9/12	Resumed service 9/18
Pamlico River	Shutdown 9/12	Resumed service 9/18
Cherry Branch	Shutdown 9/12	Resumed daylight only runs 9/18. Normal ops 9/25

- Space banking (holding spaces) was in effect for locals, NCDOT crews, power company crews, and other first responders to board Ocracoke routes first to assist with returning to the island safely and restoring service.

# Ferry Boarding Priority Policy

## Two types of priority passes: Commercial & Residential

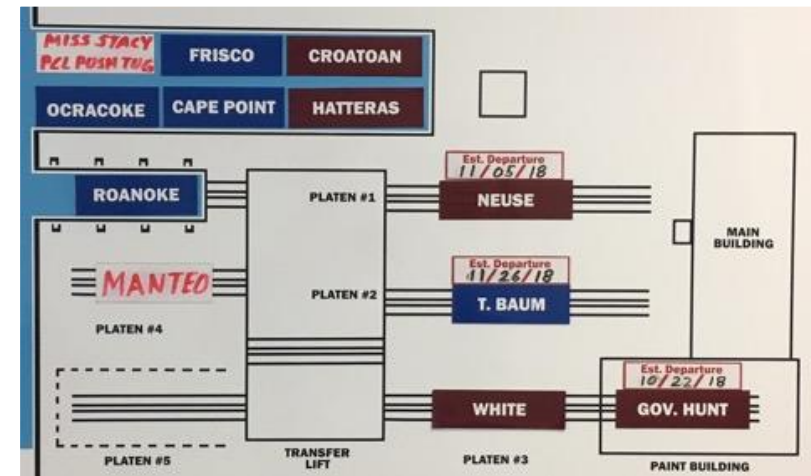
*Note: Priority Pass procedure is not storm specific and is in effect year round.*

- **Commercial priority** is a fee-based status requiring services provided to Ocracoke Island:
  - Business passes are available for \$150 and apply to all vehicles in a business fleet
  - Those exempt from fees and afforded priority are:
    - US Postal Service
    - Official vehicles in emergency status
    - Ferry employees in work status
    - Management approved
- **Residential priority** eligibility is confirmed by recording number and visual confirmation:
  - Valid NC Driver's License with Ocracoke address, AND
  - Vehicle registration with Ocracoke address (registration and NCDL address must match)
  - Employee making confirmation is noted and recorded in database

# Vessel Mooring Plan

On Sept. 12 all vessels were at predetermined mooring sites.

- Currituck: 1 vessel
- Shipyard in Mann's Harbor: 10 vessels
- Swan Quarter Terminal: 8 vessels
- Pamlico River: 1 vessel
- Cherry Branch: 4 vessels
- Lyons Shipyard (Norfolk VA): 1 vessel





# Staffing

**Personnel/equipment/communication systems were strategically staged for staff return to facilities to begin damage assessment and immediate protective actions.**

- 8 crew members in Plymouth in rooms reserved by the Ferry Division
- 2 employees in Raleigh to work from EOC
- A small number of crew members (1 – 2 people) chose to remain at Hatteras Terminal, Cherry Branch, Swan Quarter, as well as Ocracoke
- Other employees were either at their homes or in evacuation locations



# Asset Damage and Estimates

*Cost estimates are being prepared.*

## Currituck

- Minimal shingle damage - storage building
- Washout area under front sidewalk

## Hatteras Ops and Campus

- Oil containment structure - roof and structure
- Broken roof antenna

## Hatteras Maintenance

- Minimal shingle damage
- Lightning rod missing

## Hatteras Dorms

- Minimal shingle damage

## Southdock (Ocracoke North)

- Shingle and tar paper damages

## Ocracoke Ops and Dorm

- Minimal shingle damage
- Skylight damage

## Bayview and Aurora

- Large amounts of debris on facility property
- Extensive bulkhead and rip rap damage/erosion (Foam Injection required)
- Extensive fencing damage
- Electrical damage
- Facility flooding – Aurora
- Sidewalk destroyed – Bayview
- Minimal shingle damage
- AC unit destroyed – Aurora

## Cherry Branch Ops

- Extensive amount of debris on grounds
- Extensive erosion behind bulkhead
- All shore side chain link fencing destroyed
- Extensive shore power electrical damage
- Light pole down
- Large washout areas
- Missing shingles on multiple campus buildings

## Cherry Branch Maintenance

- Significant flooding inside maintenance shop
- Metal roll up door damage

## Minnesott Beach

- Fallen tree
- Minimal erosion behind bulkhead

## Cedar Island Ops

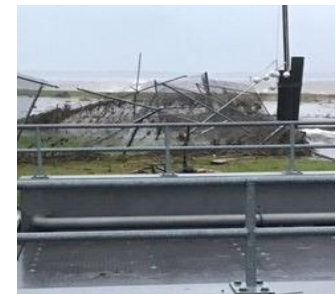
- Shingles missing
- Welcome sign damaged

## Cedar Island Maintenance

- Extensive shingle damage

## Southport & Fort Fisher

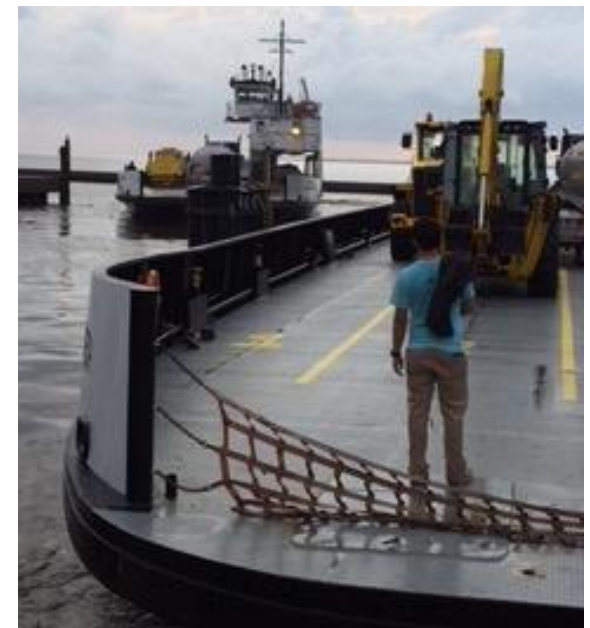
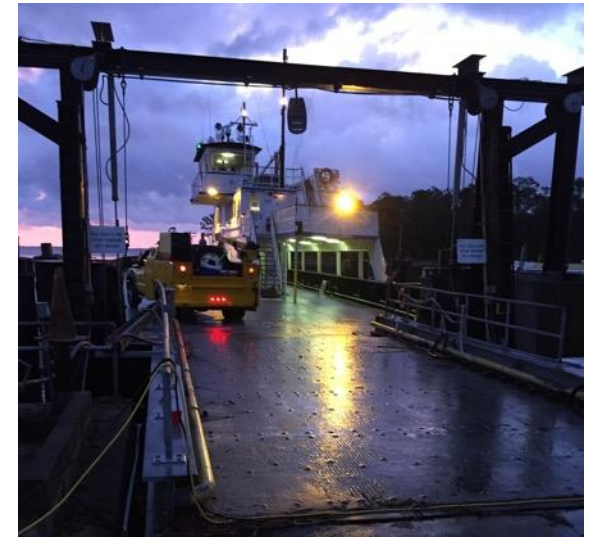
- Shingles missing



Cherry Branch

# Continuing Recovery

- Supported local partners by assisting with hauling equipment and supplies. (Hwy 12 mostly)
- Restored services to normal capacity.
- Contracts are being created for major repairs at locations such as Cherry Branch, Bayview, Aurora, and Cedar Island.
  - Includes repairs for bulkheads, electrical, extensive roof damages
  - Also includes repairs to shore power system under separate contract
  - Initial estimates for repairs approximately \$550K
- NCDOT Ferry Division Facility Maintenance covered smaller repairs.
  - Minimal shingle damages, skylights, siding, new guard shack construction
  - Initial estimates for repairs approximately \$100K



*Hauling equipment*

# Recovery Timeline for Facility Repairs

Proposals, specifications, and estimates are being prepared by Ferry Division personnel for Division 1 to advertise the contracts.

- Environmental permits are needed for some repairs. Coordination with agencies has already begun and permitting will be forthcoming.
- Facility Maintenance will complete assigned repairs within a 30-day window, Sept. 17th through Oct. 17.



*Images from Pamlico River Facility (Bayview – Aurora Route)*



# Revenue Loss from Suspended Tolls

- Estimate: \$25,713
  - Service suspended: 18 days
  - Average loss/day: \$1,428.50
  - These numbers based on a comparison to last year's traffic during this same timeframe
- Locations with tolls
  - Southport to Fort Fisher Route
  - Swan Quarter to Ocracoke Route
  - Cedar Island to Ocracoke Route



Images from Cherry Branch

# Questions?



*Images from Northern End  
of Ocracoke Island (NC 12)*